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REMARKS

Reconsideration of the present application and entry of the Amendment and Request for Continued Examination are respectfully requested. Claims 1 to 11 and 20 to 21 are currently pending, claims 10 to 11 and 20 to 21 have been withdrawn, claim 1 has been amended, and new claim 22 has been presented.

The Final Office Action mailed October 9, 2003 addressed claims 1 to 11 and 20 to 21. Claims 1 to 9 were rejected, and claims 10 to 11 and 20 to 21 were withdrawn from consideration as directed to a non-elected invention. A Response to Final Office Action was filed on November 11, 2003, and the Examiner issued an Advisory Action on December 11, 2003.

Claims 1 and 8 to 9 were rejected under 35 U.S.C. § 102(b) as being anticipated by Sullivan et al. (US 5,580,057). The Examiner stated that Sullivan et al. teach a processing system for forming golf ball preforms having an internal mixer that compounds a batch of golf ball core stock, the internal mixer having a mixer outlet; a sheeter that forms golf ball core stock, the sheeter having a sheeter inlet proximate the mixer outlet and having a sheeter outlet; preform shaping means for forming golf ball preforms from the sheets of golf ball core stock; an extruder that forms golf ball core preforms of a desired shape from the sheets of golf ball core stock; and means for rolling the sheets of golf ball core stock into "pigs" prior to being extruded into golf ball core preforms.

Applicant respectfully disagrees with the Examiner. Sullivan et al. teach a processing system for forming golf ball preforms having an internal mixer that compounds a batch of golf ball core stock, the internal mixer having a mixer outlet; a two-roll mill for additional mixing of the batch after the mixer; and a sheeter that forms sheets of golf ball core stock (column 10, lines 7 to 23). Applicant respectfully submits that Sullivan et al. does not disclose a sheeter inlet that is proximate the mixer outlet or an improved system that eliminates the need for a two-roll mill or the use of high Mooney viscosity polybutadiene, as claimed in Applicant's amended claim 1. Instead, Sullivan et al. discloses the conventional, prior art system where a two-roll mill is used, as described, for example, in the present specification at page 5, line 25, to page 7, line 31). The present invention eliminates the need for additional mixing by,

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for example, a two roll-mill before the sheeter, and instead allows the batch to proceed from the mixer directly to the sheeter. Additionally, the present invention requires the use of high Mooney viscosity polybutadiene for forming the golf ball preforms.

Since, as discussed above, Sullivan et al. fails to teach each and every element of Applicant's claims, and in fact, describes an additional feature, Applicant respectfully submits that Sullivan et al. does not anticipate Applicant's claims. Applicant respectfully submits that claims 1 and 8 to 9 are not anticipated by Sullivan et al. and request that the rejection of claims 1 and 8 to 9 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

Claims 2 and 7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sullivan et al. (US 5,580,057) in view of Hamada et al. (US 4,859,166). The Examiner stated that Sullivan et al. teach the apparatus as described above, but Sullivan et al. fail to explicitly teach the sheeter including an extruder portion and a calendar portion, the extruder having two screws that feed the compounded stock to the calendar portion, the calendar portion having a first roller and a second roller that is upwardly displaced from the first roller to define a nip point where the sheets of stock are formed from the compounded stock. The Examiner further stated that Hamada et al. teach an extruder having two screws that feed compounded stock to a calendar having a first roller and a second roller that is upwardly displaced from the first roller to define a nip point for the purpose of forming rubber or elastomeric sheets with a small energy expenditure. The Examiner concluded that it would have been obvious to one having ordinary skill in the art at the time of Applicant's invention to have modified the invention of Sullivan et al. by using as the sheeter an extruder having two screws that feed compounded stock to a calendar having a first and second roller, one displaced upwardly from the other to define a nip point as taught by Hamada et al. because it enables sheets to be formed with small energy expenditure, which minimizes the cost of operation.

Applicant respectfully submits that has not made out a *prima facie* case of obviousness. As previously discussed, Sullivan et al. does not disclose Applicant's claim 1, and claims 2 and 7 depend from claim 1. The addition of Hamada et al. for the extruder portion and calendar portion does not cure the deficiency of Sullivan et al.;

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therefore, the combination of Sullivan et al. and Hamada et al. does not produce Applicant's invention.

For at least these reasons, Applicant respectfully submits that claims 2 and 7 are not obvious under 35 U.S.C. § 103(a) over Sullivan et al. in view of Hamada et al. Applicant therefore respectfully requests that the rejection of claims 2 and 7 under 35 U.S.C. § 103(a) as obvious over Sullivan et al. in view of Hamada et al. be reconsidered and withdrawn.

Claims 3 to 6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sullivan et al. (US 5,580,057) in view of Hamada et al. (US 4,859,166) and further in view of Miller et al. (US 4,065,537). The Examiner stated that Sullivan et al. and Hamada et al. teach the apparatus as described above, and Sullivan et al. additionally teach rolling sheets into pigs prior to being extruded into ball preforms. The Examiner further stated that Sullivan et al. fail to teach a warm-up mill for warming the sheets of stock; a cool down unit for cooling the sheets of stock prior to being warmed by a warm-up mill; and the warm-up mill combines the first mentioned stock with a second batch of stock to form warmed sheets of stock. The Examiner further stated that Miller et al. teach warming a sheet of stock material on a warm-up mill before using an extruder for forming ball preforms from the warmed sheets and first cooling the sheets of stock prior to being warmed by the warm-up mill; and the warm-up mill combines the first mentioned stock with a second batch of stock to form a composite sheet for the purpose of processing the stock at a higher temperature and producing the preforms of various stocks. The Examiner concluded that it would have been obvious to one having ordinary skill in the art at the time of Applicant's invention to have modified the invention of Sullivan et al. with a warm-up mill following a cool down unit as taught by Miller et al. because processing at a higher temperature reduces the amount of orientation in a stock sheet and to have modified Sullivan et al. with a warm-up mill that combines two stocks to form a warm composite sheet as taught by Miller et al. because preforms made of various stocks reduces the amount of orientation in the preform.

Applicant respectfully submits that has not made out a *prima facie* case of obviousness. As previously discussed, Sullivan et al. does not disclose Applicant's

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claim 1, and claims 3 to 6 depend from claim 1. The addition of Hamada et al. and/or Miller et al., either alone or in combination, does not cure the deficiency of Sullivan et al.; therefore, the combination of Sullivan et al., Hamada et al. and Miller et al. does not produce Applicant's invention.

Additionally, Applicant respectfully submits that the Examiner has mischaracterized the teachings of Miller et al. The Examiner stated that Miller et al. teaches first cooling the sheets of stock prior to being warmed by the warm-up mill, citing column 8, lines 9 to 19. Applicant respectfully submit that the description to which the Examiner refers does not teach cooling the sheets prior to being warmed by the warm-up mill, as stated by the Examiner. Instead, Miller et al. teaches sheeting the stock on a mill, extruding the stock, cooling it, and then pressing strands together and cutting them into slugs and then molding. Miller et al. does not disclose cooling the sheets prior to warming them in a warm up mill, but instead, teaches cooling the stock after milling and extruding. Therefore, even if Miller was combined with Sullivan et al., or Sullivan et al. and Hamada et al., Applicant's system would not be disclosed.

For at least these reasons, Applicant respectfully submits that claims 3 to 6 are not obvious under 35 U.S.C. § 103(a) over Sullivan et al. in view of Hamada et al. and further in view of Miller et al. Applicant therefore respectfully requests that the rejection of claims 3 to 6 under 35 U.S.C. § 103(a) as obvious over Sullivan et al. in view of Hamada et al. and further in view of Miller et al. be reconsidered and withdrawn.

New claim 22 has been presented. Claim 22 depends from claim 1. Support for new claim 22 may be found in the specification, for example, at page 16, lines 9 to 12.

The Examiner is invited to telephone Applicant's attorney if it is deemed that a telephone conversation will hasten prosecution of the application.

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CONCLUSION

Applicant respectfully requests reconsideration and allowance of each of the presently rejected claims, claims 1 to 9. Applicant respectfully requests allowance of claims 1 to 9 and 22, the claims currently pending.

Respectfully submitted,

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